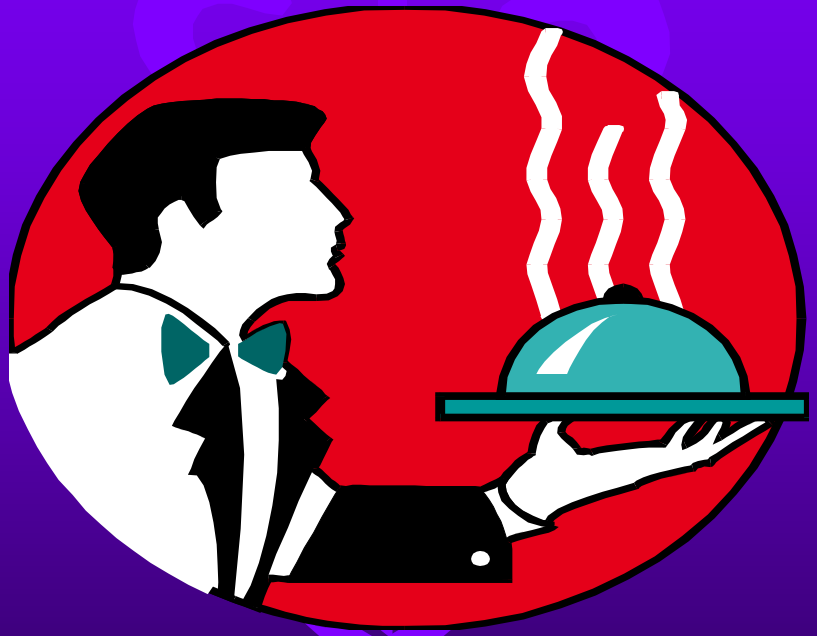
The Safe Food Handler



PREVENTIVE MEDICINE SERVICE
WEED ARMY COMMUNITY HOSPITAL
380-6209/3026/3235

Objectives

- Name the elements of a good and safe food handling program
- Understand the managers role in maintaining sanitary conditions
- Describe supervision procedures used to follow up on employees' sanitation practices

Objectives

- Keep food safe in storage
- Maintain thermometers
- Organize a cleaning program
- Protect food in preparation and while serving
- Prevent food borne illnesses

Elements of Safe Food Handling

Proper Handwashing Station

- Liquid antibacterial soap
- Hot and cold potable water
- Adequate hand drying facility
- Trash can

Some Prohibited Practices

- Using wiping cloths to remove perspiration
- Stacking plates of food during service
- Not washing hands prior to beginning work

Effective Hair Restraints

- Prevent hair from entering food
- Prevent hands from touching hair
- Choice depends on length and style of hair

CONTAMINATION VIA SMOKING

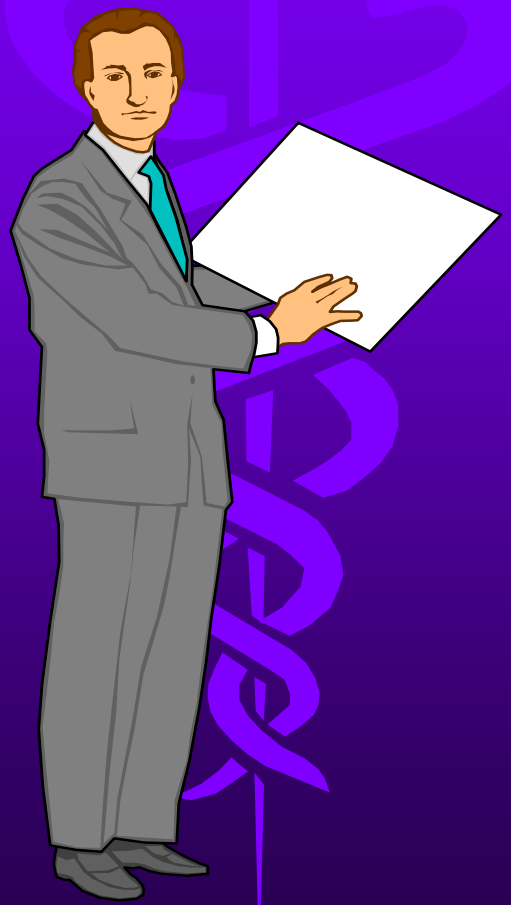
Wash Hands After

- Touching unsanitary areas of the body
- Using a handkerchief/ blowing nose
- Handling unclean equipment, utensils, money, etc.
- Handling raw food
- Smoking
- Bussing dishes, clean-up operations

WANTED for Food Contamination

- The most common sources of food contamination
- Contaminating food with hands, hair, breath, perspiration, clothing, coughs and sneezes

The Managers Role



Manager's Role

- Ensure compliance with Reg's and laws
- Overall responsibility for operation
- Ensure employees are trained
- Ensuring employee safety and customer safety

Keeping Food Safe in Storage

6 Rules of Food Storage

- Rotate the stock, First In First Out (FIFO)
- Keep potentially hazardous foods (PHFs) out of the temperature danger zone
- Store food only in areas designed for storage
- Store food in clean wrappers and containers
- Clean storage areas often
- Keep vehicles for moving food within the establishment clean

Good Refrigeration Practices

- Select a refrigerator that is conducive to good sanitation
- Maintain unit at 38F or below
- Clean and sanitize regularly
- Handle food properly
- Check food temps regularly
- Keep food at coldest temp. that will retain food quality

Frozen Food Storage Principles

- Maintain freezer at 0F or below
- Place frozen food in freezer immediately after delivery
- Rotate the stock
- Keep easily visible thermometer in the freezer
- Defrost freezers regularly

Refrigeration & Freezer Practices

DO NOT

- Fill units beyond capacity
- Store raw food above cooked food
- Add large quantities of hot food to the units
- Restrict air flow by lining shelves
- Store food on the floor in walk-in boxes

Holding Hot Foods

- Use thermometers, check the temps
- Use proper utensils for serving
- Use cover

Cooling Hot Foods

- Reduce food mass
- Reduce total cooling to less than 4 hours (2 hours to 70^0, 4 hrs to 41^0)
- Use thermometers
- Ice water bath
- Shallow pans under refrigeration

Handling Leftovers

- Discard after 24 hours
- Use thermometers
- Store in shallow pans
- Avoid raising refrigerator temperature
- Cover tightly
- Reheat to 165F within two hours for at least 15 seconds
- **Never mix leftovers with fresh portions**

Food Prepared in Microwave

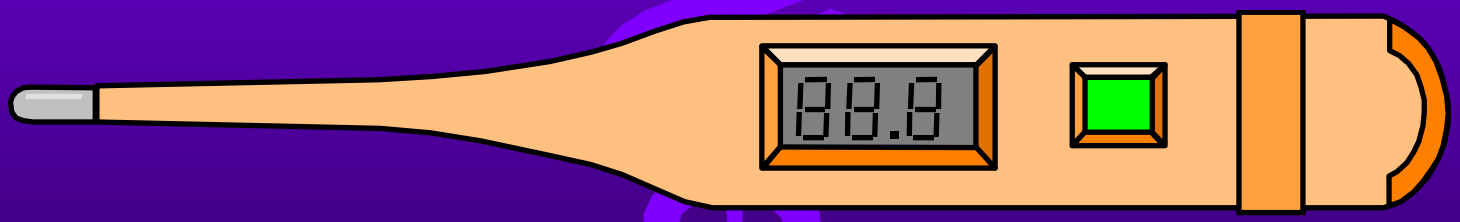
- Must be covered, rotated or stirred throughout or at least midway while heating

- Must be allowed to stand covered for 2 minutes after cooking

Receiving Canned and Dry Foods

- **Reject canned goods when**:
  - swelled top or bottom
  - leakage
  - Penetrating rust
  - Dents on seams
- Never use home canned products
- Date them upon receipt

Use Thermometers to Check Food Temperatures



Keep Thermometers Calibrated

- Boiling point method
- Freezing point method
- Calibrate every 2 weeks or as needed

Use Thermometers Correctly

- Clean and sanitize thermometer
- Take readings in thickest part of the product
- Allow time for thermometer to stabilize

Organizing a Cleaning Program

Establish an Effective Cleaning Program

- Survey needs
- Accumulate cleaning materials
- Devise a schedule
- Introduce the program
- Supervise implementation

6 Factors Which Affect Cleaning

- Type and condition of soil
- Type and temperature of water
- Surface being cleaned
- Type of cleaning agent
- Pressure applied
- Length of treatment

Master Cleaning Schedule

Item	When	What	Use
Floors	As soon as possible	Wipe up spills	Cloth, mop and bucket
Walls and Ceilings	As soon as possible	Wipe up splashes	Clean cloth, detergent
Tables	Between uses	Clean and sanitize tops	See cleaning procedure
Hoods and Filters	Daily, closing	Empty grease traps	Container for grease
Broiler	When necessary	Empty drip pan	Container for grease, cloth

Chemical Sanitizing Procedure

- **Wash** with a good detergent in hot water (110 - 120^{0}F)
- **Rinse** in clean hot water (120 - 140^{0}F)
- **Sanitize** 1 min. in 50 ppm available chlorine or approved equivalent (30 seconds in water of at least 170F)
- *50 ppm = one tbsp of household bleach per 4 gal water

Food Contact Surface

- Normally comes in contact with food
- Allows dripping or draining onto surfaces that contact food
- Surfaces must be cleaned and sanitized after each use (avoid cross contamination)

Cleanable Surface

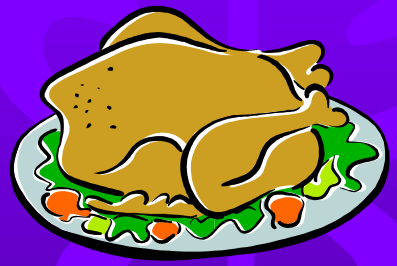
- Will not retain dirt
- Is readily exposed for inspection and cleaning
- Soil can be effectively removed by normal cleaning

Contact Surfaces Must be Cleaned After Each Use

- Cleaning removes matter from a surface where it does not belong
- Sanitizing reduces bacteria to a safe level
- Helps to prevent food borne outbreaks

Protect Food in Preparation and Serving

Minimum Cooking Temperatures



- Poultry, stuffed meats, fish, and pasta 165F for at least 15 secs.
- Pork, and ground meats 150F (170F in a microwave)

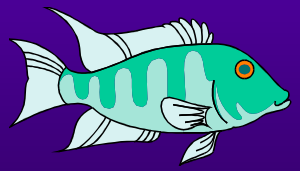
Proper Thawing of PHFs

- Under refrigeration at temperatures of 40F or below
- As part of the natural cooking process
- In a microwave oven

- Under potable running water for no more than 2 hours at a temperatures of 70F or below (Emergencies only!!!!)

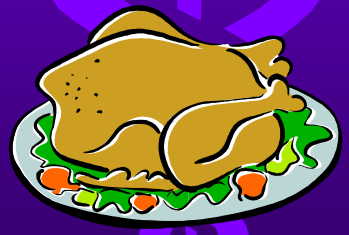
Potentially Hazardous Foods (PHFs)

- Support rapid growth of micro-organisms
- Has a pH of 4.6 or higher
- Has a water activity of 0.85 or higher

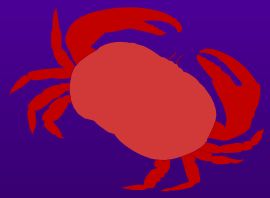


Fish

Crustacean



Poultry



Sanitary Service

- **Self-Service Foods:**
  - Protect with sneeze guards
  - Forbid refilling of soiled plate
  - Use dispensing devices
- **Bussing Personal:**
  - Wash hands between bussing and resetting tables

Potentially Hazardous Mixtures

- **Examples**:

  Batters, protein salads, custards, egg mixtures

  - Work with refrigerated ingredients
  - Use small batches
  - Serve as soon as possible

  Remember:

  Conventional cooking does not always destroy bacterial spores or toxins

  (ie., Infectious Proteins (Prions))

Develop a Self Inspection Checklist

- Obtain a pre-written checklist
- Customize the checklist
- Organize the list
- Compare with local regulations

Why Study Sanitation?

- Guest protection
- Employee protection
- Legal requirements
- Good business practice
- Pride in work place

Contamination vs. Spoilage

- **Contamination**:

  Any harmful substance in the food- often odorless and tasteless

- **Spoilage:**

  Damage to taste, aroma, and appearance

Accept Meat When

- Color:

  Beef-bright, cherry red

  Lamb-red

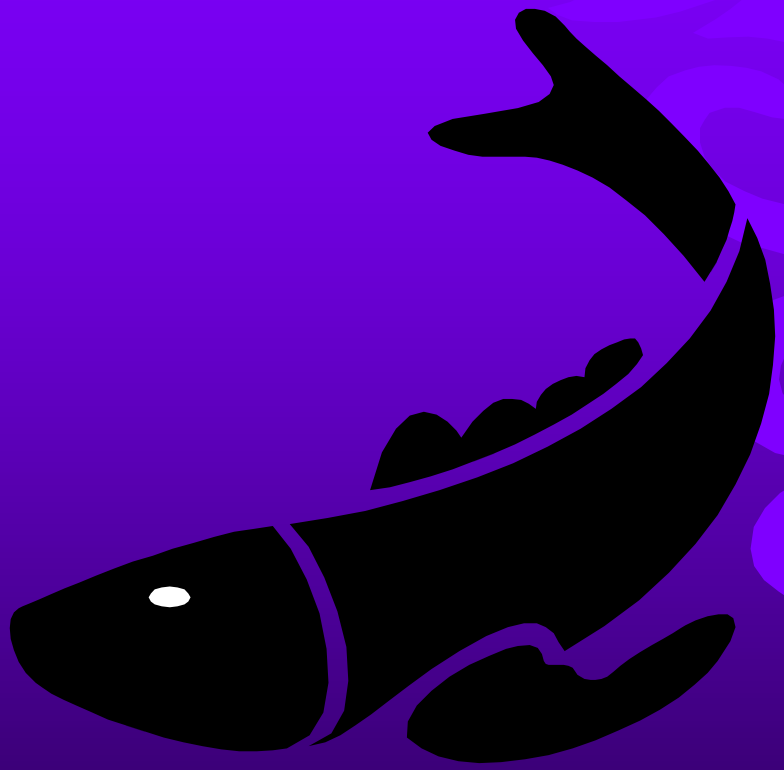
  Pork-light pink, lean, white rind

- Texture: Firm and elastic

- Temperatures: Frozen: 0F or below

  Fresh: 40F or below

Fish



- Fresh:
  - Firm flesh
  - Clear bulging eyes
  - No noticeable odor
- Spoiled:
  - Flabby flesh
  - Greyish gills
  - Dull sunken eyes

Reject Meat When

- Green or brown tinge
- Slime on surface
- Sour on surface or next to bone in pork
- It has a Foul odor

Reject Poultry When

- Abnormal odor
- Green or brown tinge
- Flabby flesh
- Stickiness under wings

Time and Temperature Principles

- Keep PHFs out of the temperature danger zone (Max time is 4 hrs)
- Pass through the danger zone as few times as possible
- Pass through the danger zone as quickly as possible

What Bacteria Need to Grow

- Warm temperatures
- Time to grow
- Moist protein rich food

3 Major Hazards

- Biological: certain fish, harmful bacteria, some plants
- Chemical: pesticides, detergents, liquid poisons
- Physical: metal scraps, broken glass

Foodborne Illnesses

Trichinosis

- **Origin**: Undercooked pork and some game foods containing roundworm Trichinella Spiralis

- **Symptoms:**

  Early: vomiting, nausea, abdominal pain

  Later: muscular stiffness,fever, rashes

- **Onset time:** 2 to 28 days after food is eaten

Salmonellosis Infection

- **Origin**: meats, poultry, sausages infected with salmonella bacteria
- **Onset time:** 6-48hours after eating
- **Symptoms:** abdominal pain, headache, fever, nausea, vomiting
- **Length of illness:** 2-3days to fatal

Infectious Hepatitis

- **Origin:** food and water contaminated with Hepatitis virus
- **Symptoms:** jaundice, abdominal pain, malaise
- **Onset time:** 10-50 days
- **Length of illness:** several weeks to months

Reporting Food-borne Outbreaks

- Preventive Medicine Investigates
- Must report if you have knowledge about outbreak
- 2 or more people sick = an outbreak

Review

- Elements of Safe food handling
- The managers role
- Supervision procedures
- Keeping food safe in storage
- Thermometers
- Organizing a cleaning program
- Protection of food
- Food borne Illnesses

Any Questions?